DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the

fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 02/16/2010 has been entered.

Response to Arguments

2.   Applicant's arguments filed 01/14/2010 have been fully considered but

they are not persuasive.

3.   With respect to Applicant's argument that "Isshiki does not describe that

an examining unit determines whether the result of examination of a hardware

resource by an examining unit is stored in a storage unit, and if the result of the

examination that the examining unit is to perform is stored in the storage unit, the

stored result of the examination is used".

        In response, Isshiki '384 does not explicitly show wherein said examining

unit determines whether the result of the examination that said examining unit is

to perform is stored in said storage unit, and uses, if the result of the examination

that said examining unit is to perform is stored in said storage unit, the stored

result of the examination.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kaneko '040. In particular, Kaneko '040 teaches wherein said examining unit (CPU 801, fig. 1) determines whether the result of the examination that said examining unit is to perform is stored in said storage unit (the CPU 801 controls the start and execution of the transmission on the basis of the result of the detection/examination and on the basis of the data or predetermined program transmitted and stored in the RAM; see col. 3, lines 15-30), and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit (a check is made to see if the program and data of the copy device / hardware resource have been transmitted from the communicating apparatus; see col. 8, lines 54-60, fig. 8), the stored result of the examination (i.e., a transmission flag which is set into a flag storage area that is held in, such as the RAM 802 is reset; see col. 7, lines 35-50 and col. 8, lines 55-65, figs. 5, 8).

In view of the above, having the system of Isshiki and then given the well-established teaching of Kaneko, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Isshiki as taught by Kaneko to include: wherein said examining unit determines whether the result of the examination that said examining unit is to perform is stored in said storage unit, and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit, the stored result of the examination. Doing this so that the operation can be performed and the reliability of the device is remarkably improved.

4.   With respect to Applicant's argument that "Isshiki fails to teach or suggest
a configuration unit configured to store identification information of the program
and identification information of the examining unit".

In response, Isshiki '384 discloses a configuration unit (operation system
OS task /Operation Unit 1012, fig. 2) configured to store identification information
of the program and identification information of the examining unit (i.e., NVRAM
11 stores mode setting information from the operation unit 1012, and flags
referred to by boot processing in resetting or reactivation; see page 4,
paragraphs [51], [70]-[72], fig. 5).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for
all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

6.   Claims 1, 3-4, 6-10, 12-24 are rejected under 35 U.S.C. 103(a) as being
unpatentable over Isshiki (US 2002/0118384) in view of Kaneko et al. (US
5,752,040).

Regarding claim 1, Isshiki '384 discloses an image forming apparatus (Fig.
1), comprising:

a hardware resource (3, 7, 10, fig. 2);

a program (HD initialization task, print job file processing task,

applications; see page 4, paragraphs [0071]-[0072]);

an examining unit (CPU 1 /Controller 10, fig. 2) configured to examine said

hardware resource (i.e., The CPU 1 controls access to various devices /hardware

connected to a system bus 5 on the basis of a control program stored in the

program ROM 2A or a control program which is stored in a hard disk (HD) 3 and

loaded onto a RAM 4 in activation; Page 3, paragraph [0045], fig. 2) and

determine whether said hardware resource exists (i.e., the task activates a

hardware check program to check whether hardware is abnormal; Page 3,

paragraph [0068]), and output, in response to a positive determination, a normal

value and output (i.e., hardware exists, the task initializes various devices; Page

4, paragraph [0070]), in response to a negative determination, an abnormal value

as the result of the examination (i.e., the task shifts to step S504 to display

abnormal hardware, and ends a series of processes; Page 3, paragraph [0069]);

a configuration unit (operation system OS task /Operation Unit 1012, fig.

2) configured to store identification information of the program and identification

information of the examining unit (i.e., NVRAM 11 stores mode setting

information from the operation unit 1012, and flags referred to by boot processing

in resetting or reactivation; see page 4, paragraphs [51], [70]-[72], fig. 5);

an activating unit (the boot processing task, page 3, paragraph [0068])

configured to activate the examining unit prior to the execution of the program,

and in response to the positive determination activate said program (i.e., the task

initializes various devices on the main body 1000 and the task executes various initialization operations of a basic OS which will run on the CPU 1, and activates the basic OS program; Page 4, paragraph [0070] - [0072], fig. 5);

a storage unit configured to store the result of the examination of said examining unit (i.e., a storage medium (recording medium) which stores software program codes for realizing the functions is supplied to a system or apparatus; see page 6, paragraphs [0092], [0137], fig. 7),

Isshiki '384 does not explicitly show wherein said examining unit determines whether the result of the examination that said examining unit is to perform is stored in said storage unit, and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit, the stored result of the examination.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kaneko '040. In particular, Kaneko '040 teaches wherein said examining unit (CPU 801, fig. 1) determines whether the result of the examination that said examining unit is to perform is stored in said storage unit (the CPU 801 controls the start and execution of the transmission on the basis of the result of the detection/examination and on the basis of the data or predetermined program transmitted and stored in the RAM; see col. 3, lines 15-30), and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit (a check is made to see if the program and data of the copy device / hardware resource have been transmitted from the communicating apparatus; see col. 8, lines 54-60, fig. 8), the stored result of the

examination (i.e., a transmission flag which is set into a flag storage area that is

held in, such as the RAM 802 is reset; see col. 7, lines 35-50 and col. 8, lines 55-

65, figs. 5, 8).

   In view of the above, having the system of Isshiki and then given the well-

established teaching of Kaneko, it would have been obvious to one having

ordinary skill in the art at the time of the invention was made to modify the

system of Isshiki as taught by Kaneko to include: wherein said examining unit

determines whether the result of the examination that said examining unit is to

perform is stored in said storage unit, and uses, if the result of the examination

that said examining unit is to perform is stored in said storage unit, the stored

result of the examination. Doing this so that the operation can be performed and

the reliability of the device is remarkably improved.

   Regarding claim 3, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said configuration unit configures a one-to-"n" (n: an integer

more than 1) relation between said examining unit (CPU 1, fig. 2) and a plurality

of said programs (i.e., the task causes the basic OS activated in step S507 to

generate and activate application tasks; see page 4, paragraphs [0070]-[0072],

fig. 5).

   Regarding claim 4, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said configuration unit (operation system OS task, page 4,

paragraphs [0070]-[0072]) configures an "n"-to-one (n: an integer more than 1)

relation between a plurality of said examining units (CPU 1 /Controller 10, fig. 2)

and said program (i.e., the task executes various initialization operations of a

basic OS which will run on the CPU 1, and activates the basic OS program; see

page 4, paragraph [0070], fig. 5).

Regarding claim 6, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said activating unit (the boot processing task, page 3, paragraph

[0068]) activates said examining unit in compliance with a relation configured in

said configuration unit (i.e., the task causes the basic OS activated in step S507

to generate and activate application tasks such as the above-described network

monitoring task and print job file processing task which run on the LBP main

body 1000; see page 4, paragraph [0072], figs. 2, 5).

Regarding claim 7, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said activating unit, after activating said program, terminates

said examining unit (i.e., after the processing shifts to the applications, the task

advances to step S505 to end a series of processes; see page 4, paragraph

[0072], fig. 5).

Regarding claim 9, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein

said examining unit (CPU 1 /Controller 10, fig. 2) determines, if a device

driver corresponding to said hardware resource can be successfully opened or is

already opened (i.e., the HD spool initialization task is activated. Then, the task

shifts to step S602 to check whether a print job file exists on the /SPOOL

directory 302 of the HD 3; see page 4, paragraph [0075], figs. 5-6), that said

hardware resource exists (i.e., the task advances to step S603 to delete all the

print job files on the /SPOOL directory 302; see page 4, paragraph [0077], fig. 6),

and determines that said hardware resource does not exist otherwise (i.e., the

task advances to step S604 without any processing, and ends a series of

processes; see page 4, paragraph [0076], fig. 6).

　　　　Regarding claim 10, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein,

　　　　in response to receipt of the normal value output by said examining unit

(CPU 1 /Controller 10, fig. 2) in the determination as to whether said hardware

resource exists that operates partially or entirely as one of a printer, a copier, a

facsimile machine, and a scanner, said activating unit activates said program

corresponding to the one of the printer (i.e., the task causes the basic OS

activated in step S507 to generate and activate application tasks such as the

network monitoring task and print job file processing task which run on the Laser

beam printer LBP main body 1000; see page 4, paragraph [0072], figs. 2, 5), the

copier, the facsimile machine, and the scanner.

　　　　Regarding claim 12, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein

in response to receipt of the normal value output by said examining unit (CPU 1 /Controller 10, page 4, paragraph [0070], fig. 2) in the determination as to whether a hard disk drive exists (i.e., the task advances to step S603 to delete all the print job files on the /SPOOL directory 302; see page 4, paragraph [0077], figs. 3, 6), said activating unit (the boot processing task, page 3, paragraph [0068]) configures a RAM disk in compliance with a relation configured in said configuration unit (i.e., a control program which is stored in a hard disk (HD) 3 and loaded onto a RAM 4 in activation; see page 3, paragraphs [0045], [0058], figs. 2-3).

Regarding claim 13, Isshiki '384 discloses the image forming apparatus (Fig. 1), wherein said examining unit (CPU 1 /Controller 10, page 4, paragraph [0070], fig. 2) determines whether said hardware resource satisfies a predetermined performance requirement (i.e., if "current time"-"previous boot time" is smaller than preset T1 in step S1002; see page 6, paragraph [0130], fig. 11), and outputs, in response to a positive determination, a normal value and outputs (i.e., the task advances to step S602 to execute the above-described processes in steps S602 and S603, such as check the presence of a print job file on a /SPOOL directory 302; see page 6, paragraph [0130], fig. 11), in response to a negative determination, an abnormal value as the result of the determination (i.e., if "current time"-"previous boot time" is equal to or larger than T1 in step S1002, the task advances to step S1003 without any processing; see page 6, paragraph [0131], fig. 11).

Regarding claim 14, Isshiki '384 discloses the image forming apparatus
(Fig. 1), wherein

in response to receipt of the normal value output by said examining unit
(CPU 1, page 4, paragraph [0070], fig. 2) in the determination as to whether a
central processing unit satisfies a predetermined performance requirement (i.e., if
"current time"-"previous boot time" is smaller than preset T1 in step S1002; see
page 6, paragraph [0130], fig. 11), said activating unit (the boot processing task,
page 3, paragraph [0068]) activates said program having the relation with said
examining unit (i.e., the task advances to step S602 to execute the above-
described processes in steps S602 and S603, such as check the presence of a
print job file on a /SPOOL directory 302; see page 6, paragraph [0130], fig. 11),

in response to receipt of the abnormal value output by said examining unit,
said activating unit does not activate said program having the relation with said
examining unit (i.e., if "current time"-"previous boot time" is equal to or larger than
T1 in step S1002, the task advances to step S1003 without any processing; see
page 6, paragraph [0131], fig. 11).

Regarding claim 15, Isshiki '384 discloses the image forming apparatus
(Fig. 1), wherein said activating unit (the boot processing task, page 3, paragraph
[0068]), in response to receipt of the normal value from said examining unit (CPU
1, page 4, paragraph [0070], fig. 2) as the result of a memory check (i.e., a print
job file left in a hard disk is checked in boot processing; see Abstract), activates

said program related to said examining unit in said configuration unit (i.e., the
task causes the basic OS activated in step S507 to generate and activate an HD
spool initialization task; see page 4, paragraph [0071], fig. 5), and in response to
receipt of the abnormal value from said examining unit as the result of the
memory check, does not activate said program (i.e., if hardware is abnormal in
step S503 (YES), the task shifts to step S504 to display abnormal hardware, and
ends a series of processes; see page 3, paragraph [0069], fig. 5).

       Regarding claim 16, Isshiki '384 discloses the image forming apparatus
(Fig. 1), wherein
       said configuration unit (operation system OS task, page 4, paragraphs
[0070]-[0072]) configures a relation between said examining unit (CPU 1, page 4,
paragraph [0070], fig. 2) and one of a directory in which said program is located
and an upper directory thereof (i.e., reference numeral 301 denotes a /(root
directory); and 302 and 303, a SPOOL directory and IMAGE directory
immediately below the root directory; see page 3, paragraphs [0057]-[0058], fig.
3);
       said activating unit (the boot processing task, page 3, paragraph [0068]),
in response to receipt of the normal value as a result of the determination (i.e.,
the print job file processing task monitors the /SPOOL directory 302 of the HD 3,
and waits until an HD-spooled print job file is detected / installed; see page 3,
paragraph [0062], fig. 4), installs the directory or the upper directory related to
said examining unit (i.e., if an HD-spooled print job file is detected /installed, the

task shifts to step S403; see page 3, paragraph [0062], fig. 4), and in response to

receipt of the abnormal value as the result of the determination, installs neither

the directory nor the upper directory (i.e., The task returns to step S402 again

and waits until a print job file is detected /installed; see fig. 4).

Regarding claim 17, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein

said examining unit (CPU 1, page 4, paragraph [0070], fig. 2) determines

whether a predetermined identifier of said hardware resource satisfies a

predetermined condition (i.e., if "current time"-"previous boot time" is smaller than

preset T1 in step S1002; see page 6, paragraph [0130], fig. 11), outputs a normal

value in response to a positive determination (i.e., the task advances to step

S602 to execute the above-described processes in steps S602 and S603, such

as check the presence of a print job file on a /SPOOL directory 302; see page 6,

paragraph [0130], fig. 11), and outputs an abnormal value in response to a

negative determination (i.e., if "current time"-"previous boot time" is equal to or

larger than T1 in step S1002, the task advances to step S1003 without any

processing; see page 6, paragraph [0131], fig. 11).

Regarding claim 19, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein

said activating unit (the boot processing task, page 3, paragraph [0068])

executes said program configured in said configuration unit (operation system

OS task, page 4, paragraphs [0070]-[0072], fig. 5) as related to said examining

unit (CPU 1, fig. 2) in response to receipt of the normal value from said

examining unit as the result of the determination (i.e., the task executes various

initialization operations of a basic OS which will run on the CPU 1, and activates

the basic OS; see page 4, paragraphs [0070]-[0072], fig. 5), and does not

execute said program configured in said configuration unit as related to said

examining unit in response to receipt of the abnormal value from said examining

unit as the result of the determination (i.e., if hardware is abnormal in step S503

(YES), the task shifts to step S504 to display abnormal hardware, and ends a

series of processes; see page 3, paragraph [0069], fig. 5).

　　　　Regarding claim 20, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein

　　　　said storage unit (3, 4, 11, fig. 2) is a memory region that said examining

unit (CPU 1 /Controller 10, fig. 2) can directly access (Fig. 2).

　　　　Regarding claim 21, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said activating unit (the boot processing task, page 3, paragraph

[0068]) is activated by an operating system that is activated after the power of the

image forming apparatus is turned on (i.e., in boot processing executed upon

power-on or resetting of the laser beam printer; see page 3, paragraphs [0066]-

[0067], fig. 5).

Regarding claim 22, Isshiki '384 discloses the image forming apparatus

(Fig. 1), wherein said program (basic OS program, HD initialization task program,

print job file processing task program, paragraphs [0070]-[0072], figs. 5-11)

further comprises:

an application program used for image forming (i.e., the task causes the

basic OS activated in step S507 to generate and activate application tasks such

as the above-described network monitoring task and print job file processing task

which run on the LBP main body 1000; see page 4, paragraph [0072], fig. 2);

a control service program that manages said hardware resource used for

the image forming (i.e., the task initializes various devices on the LBP main body

1000 and advances to step S507. In step S507, the task executes various

initialization operations of a basic OS which will run on the CPU 1, and activates

the basic OS; see page 4, paragraph [0070], fig. 2);

an operating system (i.e., the task executes various initialization

operations of a basic OS which will run on the CPU 1, and activates the basic

OS; see page 4, paragraph [0070], fig. 2).

Regarding claim 23, claim 23 is the method claim of device claim 1.

Therefore, method claim 23 is rejected for the reason given in device claim 1.

Regarding claim 24, Isshiki '384 discloses a computer-readable storage

medium storing a program that causes a computer having a hardware resource

and a program (3, 4, 11, page 1, paragraph [0013], fig. 2) to function as:

an examining unit (CPU 1 /Controller 10, fig. 2) that examines said hardware resource (i.e., The CPU 1 controls access to various devices /hardware connected to a system bus 5 on the basis of a control program stored in the program ROM 2A or a control program which is stored in a hard disk (HD) 3 and loaded onto a RAM 4 in activation; Page 3, paragraph [0045], fig. 2) and determines whether said hardware resource exists (i.e., the task activates a hardware check program to check whether hardware is abnormal; Page 3, paragraph [0068]), and output, in response to a positive determination, a normal value and output (i.e., hardware exists, the task initializes various devices; Page 4, paragraph [0070]), in response to a negative determination, an abnormal value as the result of the examination (i.e., the task shifts to step S504 to display abnormal hardware, and ends a series of processes; Page 3, paragraph [0069]);

a configuration unit (operation system OS task, page 4, paragraphs [0070]-[0072]) in which a relation between said examining unit and said program is configured (i.e., the task executes various initialization operations of a basic OS which will run on the CPU 1, and activates the basic OS program; see page 4, paragraph [0070], fig. 5);

an activating unit (the boot processing task, page 3, paragraph [0068]) that activates said program having the relation with said examining unit based on the examination (i.e., the task initializes various devices on the main body 1000 and the task executes various initialization operations of a basic OS which will run on the CPU 1, and activates the basic OS program; Page 4, paragraph [0070] - [0072], fig. 5);

a storage unit configured to store the result of the examination (i.e., a storage medium (recording medium) which stores software program codes for realizing the functions is supplied to a system or apparatus; see page 6, paragraphs [0092], [0137], fig. 7).

Isshiki '384 does not explicitly show wherein said examining unit determines whether the result of the examination that said examining unit is to perform is stored in said storage unit, and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit, the stored result of the examination.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kaneko '040. In particular, Kaneko '040 teaches wherein said examining unit (CPU 801, fig. 1) determines whether the result of the examination that said examining unit is to perform is stored in said storage unit (the CPU 801 controls the start and execution of the transmission on the basis of the result of the detection/examination and on the basis of the data or predetermined program transmitted and stored in the RAM; see col. 3, lines 15-30), and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit (a check is made to see if the program and data of the copy device / hardware resource have been transmitted from the communicating apparatus; see col. 8, lines 54-60, fig. 8), the stored result of the examination (i.e., a transmission flag which is set into a flag storage area that is held in, such as the RAM 802 is reset; see col. 7, lines 35-50 and col. 8, lines 55-65, figs. 5, 8).

In view of the above, having the system of Isshiki and then given the well-established teaching of Kaneko, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system of Isshiki as taught by Kaneko to include: wherein said examining unit determines whether the result of the examination that said examining unit is to perform is stored in said storage unit, and uses, if the result of the examination that said examining unit is to perform is stored in said storage unit, the stored result of the examination. Doing this so that the operation can be performed and the reliability of the device is remarkably improved.

Regarding claim 18, Isshiki '384 does not explicitly show the image forming apparatus, wherein said examining unit determines whether an identifier stored in an SD card matches an identifier of a slot to which the SD card is inserted, outputs a normal value in response to a positive determination, and outputs an abnormal value in response to a negative determination.

However, the above-mentioned claimed limitations are well known in the art as evidenced by Kaneko '040. In particular, Kaneko '040 teaches the image forming apparatus (Fig. 2), wherein said examining unit (CPU 801, fig. 1) determines whether an identifier (i.e., the CPU 801 determines that the version of the program stored at present is the special version; see col. 8, lines 33-35, fig. 1) stored in an SD card matches an identifier of a slot to which the SD card is inserted (i.e., the IC card as an external storage device 807 has been inserted into the card inserting portion of the copy device; col. 8, lines 15-17), outputs a

normal value in response to a positive determination (i.e., The program and data

of the copy device are read out from the IC card as an external storage device

807 and are stored into the data storage area in the RAM 802 through the

interface 805; see col. 8, lines 40-45), and outputs an abnormal value in

response to a negative determination (i.e., the updating of the program is

inhibited; col. 8, line 39).

　　　　In view of the above, having the system of Isshiki and then given the well-

established teaching of Kaneko, it would have been obvious to one having

ordinary skill in the art at the time of the invention was made to modify the

system of Isshiki as taught by Kaneko to include: the image forming apparatus,

wherein said examining unit determines whether an identifier stored in an SD

card matches an identifier of a slot to which the SD card is inserted, outputs a

normal value in response to a positive determination, and outputs an abnormal

value in response to a negative determination, since Kaneko stated in col. 1,

lines 10-20 that such a modification would ensure a copy device which can

execute the copying operation on the basis of data that is supplied from an

external device through an external interface.

　　　　Regarding claim 69, Kaneko '040 discloses the image forming apparatus

(Figs. 1-2), wherein said identifier (i.e., the program and data are read out from

the IC card as an external storage device 807 and the read-out program and data

are stored into a data storage area in the RAM 802 through the interface 805;

see col. 7, lines 20-25) is a number associated with said slot (col. 7, lines 5-65

and col. 8, lines 5-65; it should be noted that an identifier is a number associated

with a slot when an external device is inserted into the slot).

Conclusion

7.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Allen H. Nguyen whose telephone number is

(571)270-1229. The examiner can normally be reached on 9:00 AM-6:00 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, KING Y. POON can be reached on (571) 272-7440. The

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

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9199 (IN USA OR CANADA) or 571-272-1000.

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